

PATENT APPLICATION

Attorney Docket: 54391

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

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| Applicant: | Ward |
| Serial No.: | 9/655,987 |
| Filed: | 9/6/2000 |
| For: | Composition for Protecting Work Surfaces from Contamination |
| Group Art Unit: | 1774 |
| Examiner: | Dicus, Tamra |

SUPPLEMENTAL BRIEF FOR APPELLANT

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

This is an appeal from the decision of the Examiner dated 7/23/2007, rejecting Claims 1-8 and 21-28 in the above-identified patent application. Applicant originally filed an appeal after a final rejection dated 6/2/03. The Examiner terminated this first appeal because the Examiner wished to make new grounds for rejection. In addition to the new art rejection, the Examiner made a Section 112, second paragraph rejection that the Examiner could have made in the office action that preceded the first appeal. Because of this untimely new rejection, Applicant was forced to abandon the first appeal to correct this Section 112 issue. Were it not for that late Section 112 rejection, Applicant would have re-instated the original appeal, thereby saving the fees in question. Applicant filed a second appeal on 8/5/04 appealing the new grounds for rejection. The Examiner pointed out an error in the brief in question, and Applicant filed a corrected brief on 10/14/04. The Examiner then rejected the corrected brief because the Examiner maintained that the previously filed brief was defective because the summary of the invention did not contain a concise statement explanation of the subject matter of each independent claim on appeal and because the grouping of the claims lacked a

statement that each group of claims “stand or fall together”. Applicant filed another brief pointing out that the Examiner was in error with respect to the “stand or fall together rejection” and that the Summary of the Invention had not changed since the original brief had been filed and that it met the requirements as proved by insertions indicating which independent claims were discussed at each point in the Summary.

The Examiner then re-opened prosecution again to make yet another new grounds for rejection. Appellant filed a brief to address the new grounds for rejection on 4/27/2006. The Board affirmed all the claims except 19 and 20 in Appellant’s favor on 2/8/2007. Applicant subsequently canceled Claims 19 and 20 in response to an office action citing the decision of the Board and stating that the remaining claims would be allowed. The Examiner then re-opened prosecution citing new art.

The present brief is filed to address the new grounds for rejection presented in the office action dated 7/23/2007. In this office action, the Examiner indicated that Applicant could reinstate the appeal and file a supplemental brief addressing the new grounds for rejection. However, Applicant submits that only a new appeal is proper at this point, since the Board has already rendered a decision in the last appeal. Accordingly, Applicant filed a notice of appeal on December 12, 2007. This brief is filed to support that appeal.

It is assumed that the Examiner has now withdrawn all previous grounds for rejection. However, all previously filed briefs in this application are hereby incorporated by reference and relied upon to address the earlier grounds for rejection and to provide any missing required information that may be missing from this brief.

I. REAL PARTY IN INTEREST

The real party in interest is Dr. Calvin B. Ward.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal. However, there may be another appeal in 10/278,190 that would be affected by the outcome of this appeal.

III. STATUS OF THE CLAIMS

Claims 1-8, and 21-28 are currently pending in this patent application. In the Office Action dated 7/23/2007, the Examiner reopened prosecution and rejected these claims. Claims 9-20 have been canceled. Claims 1-8 and 21-28 are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments have been made since the rejection on 7/23/07.

V. SUMMARY OF THE INVENTION

The present invention is directed to using a novel sheet to protect a surface by placing this sheet in contact with the surface. The sheet includes an absorbent layer and a water-impermeable electrostatically charged layer. There are six independent claims, 1, 21, 25, 26, 27, and 28.

With reference to Claim 1, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Sheet 10 is constructed from a water-impermeable electrostatically charged sheet 11 having a top and bottom surface and an absorbent layer 12. The absorbent layer has top and bottom surfaces, the bottom surface of the absorbent layer being bonded to the top surface of the electrostatically charged sheet. The absorbent layer is divided into a plurality of cells 14. Liquid is prevented from moving between the cells.

Claims 2-6 depend from claim 1 and add further limitations regarding the composition of the absorbent layer.

Claim 7 depends from claim 1 and adds the limitation that the cells are defined by hydrophobic barriers 13 in the absorbent layer.

With reference to claim 8, refer to Figure 2, and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 8 depends from claim 1 and additionally requires a hydrophobic layer 21 bonded to the top surface of the absorbent layer. The hydrophobic layer contains a plurality of pores 22 that allow liquid incident on the hydrophobic layer to pass through that layer and be absorbed by the underlying absorbent layer.

With respect to Claim 21, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 21 requires a water-impermeable layer 11 in contact with an absorbent layer 12, wherein the absorbent layer is an open cell foam.

Claim 22 depends from Claim 21 and requires that the absorbent layer 12 is electrostatically charged.

With respect to Claim 23, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12 wherein the absorbent layer includes a fibrous mat.

Claim 24 depends from Claim 23 and further requires that the fibrous mat be electrostatically charged.

With respect to Claim 25, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. The absorbent layer includes a plurality of hydrophobic barriers 13 that define the cells and prevent liquid from moving between the cells.

With respect to Claim 26, refer again to Figure 2 and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 26 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. A hydrophobic layer 21 is bonded to a surface of the absorbent layer and includes a plurality of pores 22.

With respect to Claim 27, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged water-impermeable layer 11 and an absorbent layer 12 that are bonded together.

With respect to Claim 28 refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged

water-impermeable layer 11 and an absorbent layer 12 that are bonded together. The absorbent layer is divided into a plurality of cells 14 by a plurality of liquid impermeable barriers 13 that prevent liquid from moving from one cell to another.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Rejection of Claims 1 and 25 under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling.

B. Rejection of Claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite.

C. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of US 3,409,199 to Lake.

D. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of WO9812126 to Grone *et al* (hereafter "Grone").

E. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 5,807,366 to Milani *et al* (hereafter "Milani").

F. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 6,162,961 to Tanner *et al* (hereafter "Tanner").

G. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of US 5,789,076 to Isohata.

H. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

I. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

J. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

H. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

I. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

VII. ARGUMENT

A. Examiner's Burden

1. Rejection under 35 U.S.C. 112, second paragraph

The inquiry under the second paragraph of 35 U.S.C. 112 “is merely to determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity” (*In re Moore*, 169 USPQ 236, 238).

2. Rejection under 35 U.S.C. 102

Under 35 U.S.C. 102, the Examiner has the burden of showing by reference to the cited art each claim limitation in the reference. Anticipation under 35 U.S.C. 102 requires that each element of the claim in issue be found either expressly or inherently in a single prior art reference. *In re King*, 231 USPQ 136, 138 (Fed. Cir. 1986); *Kalman v. Kimberly-Clark Corp.*, 218 USPQ 781, 789 (Fed. Cir. 1983). The mere fact that a certain thing may result from a given set of circumstances is not sufficient to sustain a rejection for anticipation. *Ex parte Skinner*, 2 USPQ2d 1788, 1789 (BdPatApp&Int 1986). “When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference” (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). Under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element “is necessarily present in the thing described in the reference.” *Cont’l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). “Inherent anticipation requires that the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

3. Rejection under 35 U.S.C. 103

To sustain a rejection under 35 U.S.C. 103, the Examiner must show that the combined references teach each of the elements of the claim or that there is some motivation in the art for altering one of the teachings to arrive at the combined set of teachings. "The mere fact that a reference could be modified to produce the patented invention would not make the modification obvious unless it is suggested by the prior art." (*Libbey-Owens-Ford v. BOC Group*, 4 USPQ 2d 1097, 1103). "When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference" (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). In addition, the Examiner must show that there is some motivation in the art that would cause someone of ordinary skill to combine the references, and that in making the combination, there was a reasonable expectation of success. Where the claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under section 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. *In re Vaeck*, 20 USPQ2d 1438, 1442(CAFC 1991).

The mere fact that all of the limitations are known separately in the art is not sufficient to sustain a rejection for obviousness. Identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references.

The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Whether the rejection is based on an express or an implicit showing, there must be particular findings related thereto. *In re Kotzab* (CA FC) 55 USPQ2d 1313, 1316

B. Rejection of claims 1 and 25 under U.S.C. 112, first paragraph

1. Initial observations relating to the rejection of both of the claims

This rejection has been put forward after numerous rejections have been made with respect to the claims in question. In particular, this rejection is being made after three appeals have been filed. The first appeal was terminated by the Examiner to introduce a new grounds for rejection including rejections under 25 U.S.C. 112, second paragraph. The second appeal was also terminated by the Examiner to introduce yet another new grounds for rejection. A third appeal was then filed to appeal the new grounds for rejection and that appeal was decided in Applicant's favor with respect to all of the claims except Claims 19 and 20. Hence, the claims in question have been examined by the Examiner, the Examiner's supervisor, the committee that reviewed each of the appeal briefs, and the Board, and none of the individuals raised an objection under 35 U.S.C. 112, first paragraph. Hence, Applicant submits that the record implicitly argues against the rejections in question that are now being made by the Examiner, since all of these persons who are skilled in the art have had no trouble understanding the invention and how it is made and used.

2. Rejection of Claim 1

Claim 1 requires that the protective covering includes an absorbent layer that is bonded to a water impermeable electrostatically charged sheet and that the absorbent layer is divided into a plurality of cells for containing liquid within the boundaries of the cells, the liquid being prevented from moving between the cells. As best Applicant can understand the Examiner's objection, the Examiner maintains that boundaries must be hydrophobic, since the example taught in the specification utilizes hydrophobic boundaries, and that the claim is defective because the hydrophobic boundaries prevent the liquid from moving between the cells, not the boundaries or the cells themselves.

The specification refers to a preferred embodiment in which the absorbent layer is divided into cells by impregnating the absorbent material with a barrier material that prevents liquid trapped in the cell from seeping out of the cell (page 3, starting at line 5 of the specification). The specification goes on to state that the barriers could be constructed from any hydrophobic material that can be introduced into the absorbent material (page 3, starting at line 15). The specification goes on to list two exemplary materials varnish and paraffin. However, one of ordinary skill would understand that the barrier material could be a non-hydrophobic material in the case that the liquid being contained in the cells formed by the barriers would not be inhibited from moving between the cells by a hydrophobic material.

Hence, Applicant submits that the essential element is a barrier that defines the cells such that liquid is prevented from moving between the cells. Sufficient examples are given to allow one of ordinary skill to choose an appropriate barrier material depending on the liquid to be contained. Accordingly, Applicant submits that Claim 1 is enabled by the specification and the broadest embodiments enabled do not require hydrophobic barriers.

3. Rejection of Claim 25

Claim 25 specifically requires that the absorbent layer includes a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells by said barriers. Claim 25 includes the limitations that the Examiner asserts are missing from Claim 1. Furthermore, the Examiner admits that the specification teaches such barriers. Accordingly, Applicant submits that Claim 25 is not defective under 35 U.S.C. 112, first paragraph.

C. Rejection of Claim 7, and Claims 1 and 25 under 35 U.S.C. 112, second paragraph

In making this rejection, the Examiner states that the term “said hydrophobic barriers defining said cells” is uncertain. First, the Examiner states that the word “defining” is not specific enough to detail how the barriers are defined. Second, the Examiner questions whether or not the barriers themselves contain cells within. Third, the Examiner states that if “the liquid is water, then it is not logical for the barriers to be hydrophobic.”

First, Applicant submits that the wording in claim 7, which remains in its originally filed, un-amended state, has not raised any concern with respect to indefiniteness under U.S.C. 112, with either the Examiner or the Board of Appeals, through a lengthy series of office actions and appeals spanning several years. Applicant submits that the Examiner and other individuals that have reviewed this claim have apparently understood the scope and meaning of the term “hydrophobic barriers defining said cells” sufficiently to suggest that the claim limitations were satisfied by several different combinations of prior art in previous office actions, without raising any issue of indefiniteness.

Second, a cell is, by definition, a small bounded space (Webster’s New Collegiate Dictionary). The claim clearly states that the barriers define the cells; hence, the cells must have boundaries that include the barriers. Applicant submits that the wording in question clearly indicates that the physical extent of the cells is defined by the barriers. Whether or not there are additional cells of some sort within the cells that are defined by the boundaries is irrelevant to the claim at issue.

Third, Applicant submits that it is perfectly logical for cells that are to contain water to be bounded by hydrophobic barriers, as the boundaries will not be wet by the water, and hence, can prevent the water from leaking through the boundaries.

Accordingly, Applicant submits that claim 7 is definite and does point out and distinctly claim the subject matter of the invention.

While the Examiner did not specifically reject Claims 1 and 25 under 35 U.S.C. 112, second paragraph, the Examiner’s remarks under the rejection of Claim 7 contained a paragraph objecting to these claims because the term “the boundaries” has insufficient antecedent basis. As noted above, the term cell is defined to be a bounded space; hence, cells inherently have boundaries. Accordingly, Applicant submits that there is no need to recite that the cells have boundaries prior to referring to boundaries of the cells. Once again, this terminology has been reviewed numerous times, and none of the reviewers, including the Examiner, has found that there is insufficient antecedent basis for the term.

D. Summary of the teachings of the prior art cited by the Examiner

1. Schelhorn

Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like with the absorbent layer next to the meat. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the wrapping is applied to the poultry with the absorbent layer against the poultry (column 2, lines 6-8).

The only mention of electrostatic charge in the reference is a passage stating that the surface of the sheet that is bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to the electrostatically treated sheet to improve the bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

2. Lake

Lake teaches a rigid tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that are sufficiently large to allow liquid to enter the recesses and to be trapped within the recesses as long as the tray remains in a horizontal position. Lake teaches that one of the advantages of the tray lie in the fact that the tray **does not** include an absorbent layer, since such layers can lead to dehydration of the contents of the tray (col. 3, lines 45-55).

3. Grone

Grone teaches a tray for holding meat or the like in which the tray can be reused. The tray includes an absorbent layer on the bottom of the tray constructed from an open-cell plastic.

4. Milani

Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. The article is

charged to a first charge and the particles are charged to the opposite charge so as to cause the particles to be coupled to the article when the particles are introduced into the article. It is the distribution of the particles that improves the liquid distribution, not the electrostatic charge on the web. There is no teaching in Milani that the modified article obtained by introducing particles into the fibers or web is electrostatically charged after the introduction of the particles. In this regard, it should be noted that even if the underlying fibers or web are permanently charged, that charge would be cancelled by the oppositely charged particles that are introduced and coupled to the fibers or web.

5. Tanner

Tanner teaches an absorbent article having a layer of absorbent material between two layers of non-absorbent material. The improved absorption of the article is the result of the composition of the absorbent layer. The only mention of electrostatic charging in Tanner is a statement that the absorbent layer can be formed by attracting fibers to an electrostatically charged surface (column 14, lines 31-38). There is no teaching that the fibers are charged during this process or, more importantly, that the fibers are charged after the sheet of fibers is removed from the surface.

6. Isohata

Isohata teaches a food wrapping material having a sheet of semi-permeable material in contact with an absorbent layer. The semi-permeable material is a water impermeable layer that has holes therein. The layer removes liquid from the surface of the meat or poultry and sequesters that liquid in the absorbent layer to prevent discoloration of the meat.

E. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake.

1. Rejection of Claims 1, 2, 25, and 28

With reference to claim 1, the Examiner states that Schelhorn teaches all the claim limitations except for requiring that the absorbent layer be divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells. The Examiner looks to Lake for the missing teachings. The Examiner maintains that it would be obvious to apply the teachings of Lake to the sheet taught by

Schelhorn to retain liquid in the cells “to prevent the bottom of the tray from becoming wet and maintaining the strength of the tray structure”

As noted above, Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the composition is used by placing the moisture-absorbing layer against the poultry.

The only mention of electrostatic charge in Schelhorn is a passage stating that the surface of the sheet that is to be bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to improve bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

It should be noted that the electrostatic surface treatment of plastics, e.g., corona discharge, is used to alter the chemical composition of the surface, clean the surface, or remove static charge from the surface. The state of the surface after such treatment in terms of any residual electrostatic charge depends on the specifics of the particular treatment. Since such surface treatment is used to remove static charge, it is clear that the surface of the plastic is not inherently charged after such treatments. Furthermore, even if the surface were charged immediately after the treatment, such surface charges dissipate over time. Hence, it is not inherently true that the surface would have a charge at the time it is bonded to the absorbent sheet, or more importantly, after it is bonded to the absorbent sheet. The Examiner has the burden of showing that the water impermeable sheet of Schelhorn always has an electrostatic charge after it is bonded to the absorbent layer. The Examiner has not pointed to any evidence of such an electrostatic charge.

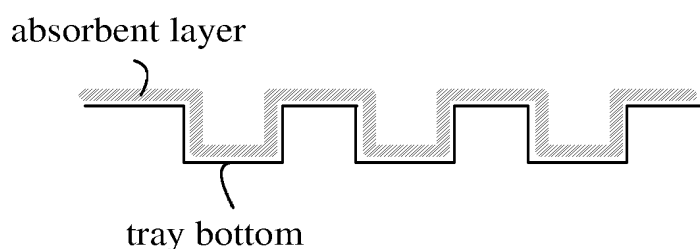
Lake teaches a tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that trap liquid. As noted above, Lake teaches that one of the advantages of the tray taught therein lies in the fact

that the tray does not include an absorbent layer, since such layers can lead to dehydration of the contents of the tray. Hence, if anything, Lake teaches away from including absorbing material in the tray.

The Examiner maintains that it would be obvious to add dividing cells to the composition of Schelhorn because Lake teaches that such cells prevent the bottom of the tray from becoming wet and maintaining the strength of tray structure.

As best Applicant can understand the Examiner's argument, it would appear that the Examiner is proposing combining the teaching of the reference so that the water impermeable sheet of Schelhorn has recesses similar to that shown in Lake. Alternatively, the Examiner could be arguing that the tray of Lake would have the composition of Schelhorn over the recessed surface thereby providing an absorbent layer that is divided into cells that contain liquid and prevent liquid from moving between the cells.

In either case, one would be left with a water impermeable layer having recesses therein and a layer of absorbent material that is somehow forced to conform to the impermeable layer as shown below. In addition, the water impermeable layer would need to be electrostatically charged.



First, it should be noted that such an arrangement would not provide an arrangement in which liquid was prevented from moving between the cells by barriers. If one cell contains liquid and the adjacent cells do not, the water absorbent material will wick the liquid up the side of the recess having the liquid and over into the adjacent recesses. Hence, the proposed combination would not satisfy the limitations of the claims in question.

Second, as noted above, Lake teaches that the absorbent material can lead to dehydration of the meat stored in tray. The purpose of the recesses in the tray of Lake is to

sequester the liquid without introducing an absorbent layer. Hence, if anything, the prior art teaches away from the embodiment proposed by the Examiner.

Furthermore, the strength of the tray in Lake lies in the plastic from which it is made, not from any absorbent material introduced into the tray. Hence, there would be no reason to construct the second alternative discussed above, since Lake teaches away from such a structure.

With respect to the first possible combination, there is no reason to put recesses in the water-impermeable wrapping composition of Schelhorn. The water-impermeable layer already protects any surface outside the packaged product from becoming wet. Schelhorn teaches that the wrapping composition must be flexible so that it can be wrapped completely around the product being protected. The composition of Lake is inherently inflexible, since the recesses would be lost if the tray were flexible enough to wrap around an object.

Finally, Applicant disagrees with the Examiner's reading of Schelhorn. The claims at issue require that the absorbent layer is bonded to the top surface of the electrostatically charged sheet and that the absorbent layer be divided into a plurality of cells that contain liquid within the boundaries of the cells. Schelhorn teaches a water impermeable sheet that is electrostatically treated prior to bonding the sheet to an absorbent layer. Claim 1 requires that the sheet be electrostatically charged after it is bonded to the absorbent layer. The Examiner has not pointed to any teaching in Schelhorn that any residual electrostatic charge is present when the absorbent layer is bonded to the sheet. As noted above, electrostatic treatments used to alter the surface properties of a plastic prior to some chemical step do not necessarily leave a residual charge on the sheet. Furthermore, the act of bonding the absorbent layer will discharge the surface charges obtained by the electrostatic treatments if the bonding material or the absorbent layer has any free ions. The Examiner has the burden of showing that the water-impermeable sheet is charged after the absorbent layer is bonded. The Examiner has not provided any evidence of such a charge. Lake does not provide the missing teachings. Hence, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to claims 1, 2, 25, and 28

2. Rejection of Claim 7

Claim 7 depends from Claim 1 and requires that the absorbent layer includes a plurality of hydrophobic barriers that define the cells. The Examiner looks to Lake as teaching hydrophobic barriers, namely the walls of the recesses in the tray constructed from a hydrophobic barrier.

The problem with the Examiner's argument is that the claim requires the barriers to be in the absorbent layer. Lake teaches that the tray, which, at best, is analogous to the water impermeable sheet of Schelhorn having the barriers. Even if one were to cover the tray of Lake with an absorbent layer, with or without the water-impermeable layer of Schelhorn, the absorbent layer would still not include the hydrophobic barriers. Accordingly, Applicant submits that there are additional grounds for allowing Claim 7.

F. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of Grone

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring that the absorbent layer comprises an open cell foam. The Examiner looks to Grone for the missing teachings.

First, as noted above with respect to claim 1, from which claim 3 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet with the absorbent layer being divided into a plurality of cells. Grone does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, Applicant submits that Lake teaches away from the combination suggested by the Examiner.

At best, Grone teaches that an open cell foam could be inserted into a tray such as that taught in Lake to act as an absorbent. However, as noted above, Lake teaches away from such an absorbent layer. Furthermore, if one were to use an absorbent layer in the tray of Lake, there would be no reason to add the recesses taught in Lake, since the foam would contain the liquid.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 3 and the claims dependent therefrom.

G. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Milani.

The Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for requiring that the open cell foam is electrostatically charged. The Examiner looks to Milani for the missing teachings. The Examiner maintains that it would be obvious to modify the open cell foam absorbent of the combination of Schelhorn, Lake and Grone by making it electrostatically charged to improve “liquid distribution” within it.

First, as noted above with respect to claim 3, from which claim 4 depends, the combination of Schelhorn, Lake and Grone does not teach the claim limitation requiring an absorbent layer bonded to a surface of an electrostatically charged sheet. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches a fibrous article that has absorbent particles distributed through out the article. The article is manufactured by charging the web and introducing particles that carry the opposite charge. The Examiner has not pointed to any teaching in Milani that the fibrous article remains charged after the particles are introduced therein. In this regard, it should be noted that the charges on the particles cancel the charges on the web when the particles stick to the web. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 4.

H. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Tanner.

With respect to claim 5, the Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for teaching a fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious

to modify the combination of Schelhorn, Lake and Grone by substituting an electrostatically charged fibrous mat for the absorbent layer in Shelhorn to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

First, as noted above with respect to claim 1 from which claim 5 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet. Grone and Tanner do not provide the missing teachings.

Second, as noted above, Lake teaches away from using absorbent layers next to the article being packaged because the absorbent material leads to dehydration of the packaged item. Increasing the absorption of the layer by utilizing the layer of Tanner would only make this problem worse. Hence, if anything the art teaches away from the combination proposed by the Examiner.

Accordingly, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 5 and the claims dependent therefrom.

Claim 6 depends from claim 5 and additionally requires that the fibrous mat is electrostatically charged. The Examiner points to two passages in Tanner (col. 14, line 32-41, col. 1, lines 45-68) as providing this teaching, and disclosing the advantages noted above with respect to claim 5.

First, as noted above, the only mention of electrostatic charging in Tanner, in the cited passages or elsewhere, is made in the context of being one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that any electrostatic charge remains on the fibers after the mat of fibers is formed and removed from that surface.

Second, the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged mat.

Third, the mat of Tanner is designed to hold large amounts of an ionic liquid, such as urine. While in the liquid state, the ionic charges would cancel the charge on the mat if such a charge exists. Hence, the benefits claimed by the Examiner, if those benefits depended on the electrostatic charge of the mat, would not be realized. Accordingly, Applicant submits that there are additional reasons for allowing claim 6.

I. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of Isohata.

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring a hydrophobic layer with pores bonded to the top surface of the absorbent layer. The Examiner looks to Isohata for the missing teachings. The Examiner maintains that it would be obvious to utilize the covering of Isohata with the combination of Schelhorn and Lake to direct food drip to the underlying absorbent sheet to prevent the meat from being discolored.

As noted above with respect to claim 1 from which claim 8 depends, the combination of Schelhorn and Lake does not teach an absorbent layer with cells bonded to a surface of an electrostatically charged sheet. Isohata does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, if anything, the art teaches away from the combination proposed by the Examiner, since Lake teaches that an absorbent layer next to the meat leads to dehydration. Hence, improving the absorption and sequestering of the liquid from the product goes against the teachings of Lake and would lead to increased dehydration of the meat. Finally, the package of Lake already sequesters the juices in a manner that prevents direct contact between the meat and the juices, and hence, there is no improvement over the system taught in Lake. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 8.

J. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

The Examiner states that Schelhorn teaches all the claim limitations of these claims except for an electrostatically charged fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious to modify Schelhorn by

including an electrostatically charged fibrous mat to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

As noted above with respect to claim 6, Applicant submits that the only mention of electrostatic charging in Tanner is in regard to one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that, after the mat of fibers is formed and removed from that surface, any electrostatic charge remains on the fibers.

Second, also as noted above with respect to claim 6, Applicant submits that the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged one. In this regard, it should be noted that charging the mat increases the cost with no benefit; hence, if anything, one of ordinary skill would use the uncharged mat to obtain the benefits cited by the Examiner. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 24.

K. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

The Examiner states that Isohata teaches all the claim limitations except for the water-impermeable sheet being electrostatically charged. The Examiner looks to Schelhorn for the missing teachings. The Examiner maintains that it would be obvious to charge the lower sheet 5 taught by Isohata to achieve an improvement in the adhesive bonding characteristics as taught by Schelhorn.

Applicant submits that the combination of teachings suggested by the Examiner would not satisfy the claim limitations. Furthermore, Applicant submits that the motivation suggested by the Examiner for making the combination is flawed.

First, Applicant disagrees with the Examiner's reading of Isohata. The Examiner points to Figure 1 of Isohata, identifying lower sheet 5 as the water-impermeable sheet required by the claim. Applicant submits that the associated text cited by the Examiner (col. 2, lines 50-65 and col. 3, lines 1-40) actually teaches that sheet 5 is permeable. Hence,

charging this sheet, as the Examiner suggests, would not produce an electrostatically charged water-impermeable sheet as required by the claim limitation in question.

Second, regarding the benefit of improved adhesion offered by the teachings of Schelhorn, Applicant submits that the method taught by Isohata includes vacuum sealing (column 2, lines 36-40) to provide an air-tight seal around the plastic wrapping. Hence, poor adhesion is not a problem, and there would be no benefit in electrostatically charging one of the intervening sheets to improve that adhesion. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 26.

L. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

Claim 27 requires an electrostatically charged sheet bonded to an absorbent sheet. As noted above, Schelhorn, at most, teaches a water impermeable sheet that is treated electrostatically to improve the bonding of the absorbent sheet to the water impermeable sheet when the two sheets are bonded by patches of adhesive. The Examiner has not pointed to any teaching that the water impermeable sheet is electrostatically charged after that sheet is bonded to the absorbent sheet. In this regard, it should be noted that electrostatic treatments do not necessarily lead to an electrostatic charge being present on the surface after the treatment is completed, no less at some subsequent time when the sheets are bonded. For example, any such charge would dissipate over time, or be discharged by contact with the absorbent material or adhesive. Hence, it is not inherent that the embodiment taught in Schelhorn has an electrostatically charged sheet after the absorbent sheet is bonded. Accordingly, Applicant submits that Schelhorn does not anticipate Claim 27.

M. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

Claim 21 contains the limitations of Claim 27 with the additional limitation that the absorbent layer is an open cell foam. The Examiner looks to Schelhorn as teaching the limitations of Claim 27 and looks to Grone as teaching an absorbent layer comprising an open cell foam.

Applicant repeats the arguments made above with respect to the rejection of Claim 21 as being anticipated by Schelhorn. Grone does not provide the missing teachings. Hence, the combination of the references does not provide all of the limitations of Claim 21. Accordingly, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to Claim 21.

N. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

Claim 22 depends from Claim 21 and introduces the additional limitation that the open cell foam is electrostatically charged. The Examiner states that Schelhorn and Grone provide the teachings of Claim 22 and looks to Milani as providing the missing teaching. The Examiner states that it would be obvious to combine the teachings to provide improved liquid distribution.

First, as noted above, Applicant submits that the combination of Schelhorn and Grone does not teach the limitations of Claim 22. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web in a manner that is aided by utilizing an electrically charged web and charging the particles to improve the attachment and distribution of the particles within the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. Merely charging the absorbent layer of Grone does not provide the benefit to which the Examiner points. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone. Milani requires a fibrous mat or web to allow the particles to infiltrate the fibrous article. The Examiner has not pointed to any teaching in the art that such a method could be used on the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 22.

VIII. CONCLUSION

Applicant respectfully submits that for the reasons of fact and law argued herein, the decision of the Examiner in finally rejecting Claims 1-8, 24-28 should be reversed.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Calvin B. Ward". The signature is fluid and cursive, with the first name "Calvin" being the most prominent part.

Calvin B. Ward
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Date: February 4, 2008

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APPENDIX

THE CLAIMS ON APPEAL:

1. A protective covering comprising:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being bonded to said top surface of said electrostatically charged sheet, said absorbent layer being divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells.

2. The protective covering of Claim 1, wherein said absorbent layer comprises paper.

3. The protective covering of Claim 1, wherein said absorbent layer comprises an open cell foam.

4. The protective covering of Claim 3, wherein said foam is electrostatically charged.

5. The protective covering of Claim 1, wherein said absorbent layer comprises a fibrous mat.

6. The protective covering of Claim 5, wherein said fibrous mat is electrostatically charged.

7. The protective covering of Claim 1, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining said cells.

8. The protective covering of Claim 1 further comprising a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores

therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

21. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet,

wherein said absorbent layer comprises an open cell foam.

22. The protective covering of Claim 21, wherein said foam is electrostatically charged.

23. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a fibrous mat.

24. The protective covering of Claim 23, wherein said fibrous mat is electrostatically charged.

25. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid, said liquid being prevented from moving between said cells by said barriers.

26. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer further comprises a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

27. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said electrostatically charged layer is bonded to said absorbent layer.

28. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer is divided into a plurality of cells for containing liquid by liquid impermeable barriers that prevent liquid from moving from one cell to another.

Evidence Appendix

none

Related Proceedings Appendix

none

PATENT APPLICATION

Attorney Docket: 54391

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

| | |
|-----------------|---|
| Applicant: | Ward |
| Serial No.: | 9/655,987 |
| Filed: | 9/6/2000 |
| For: | Composition for Protecting Work Surfaces from Contamination |
| Group Art Unit: | 1774 |
| Examiner: | Dicus, Tamra |

SUPPLEMENTAL BRIEF FOR APPELLANT

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

This is an appeal from the decision of the Examiner dated 7/23/2007, rejecting Claims 1-8 and 21-28 in the above-identified patent application. Applicant originally filed an appeal after a final rejection dated 6/2/03. The Examiner terminated this first appeal because the Examiner wished to make new grounds for rejection. In addition to the new art rejection, the Examiner made a Section 112, second paragraph rejection that the Examiner could have made in the office action that preceded the first appeal. Because of this untimely new rejection, Applicant was forced to abandon the first appeal to correct this Section 112 issue. Were it not for that late Section 112 rejection, Applicant would have re-instated the original appeal, thereby saving the fees in question. Applicant filed a second appeal on 8/5/04 appealing the new grounds for rejection. The Examiner pointed out an error in the brief in question, and Applicant filed a corrected brief on 10/14/04. The Examiner then rejected the corrected brief because the Examiner maintained that the previously filed brief was defective because the summary of the invention did not contain a concise statement explanation of the subject matter of each independent claim on appeal and because the grouping of the claims lacked a

statement that each group of claims “stand or fall together”. Applicant filed another brief pointing out that the Examiner was in error with respect to the “stand or fall together rejection” and that the Summary of the Invention had not changed since the original brief had been filed and that it met the requirements as proved by insertions indicating which independent claims were discussed at each point in the Summary.

The Examiner then re-opened prosecution again to make yet another new grounds for rejection. Appellant filed a brief to address the new grounds for rejection on 4/27/2006. The Board affirmed all the claims except 19 and 20 in Appellant’s favor on 2/8/2007. Applicant subsequently canceled Claims 19 and 20 in response to an office action citing the decision of the Board and stating that the remaining claims would be allowed. The Examiner then re-opened prosecution citing new art.

The present brief is filed to address the new grounds for rejection presented in the office action dated 7/23/2007. In this office action, the Examiner indicated that Applicant could reinstate the appeal and file a supplemental brief addressing the new grounds for rejection. However, Applicant submits that only a new appeal is proper at this point, since the Board has already rendered a decision in the last appeal. Accordingly, Applicant filed a notice of appeal on December 12, 2007. This brief is filed to support that appeal.

It is assumed that the Examiner has now withdrawn all previous grounds for rejection. However, all previously filed briefs in this application are hereby incorporated by reference and relied upon to address the earlier grounds for rejection and to provide any missing required information that may be missing from this brief.

I. REAL PARTY IN INTEREST

The real party in interest is Dr. Calvin B. Ward.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal. However, there may be another appeal in 10/278,190 that would be affected by the outcome of this appeal.

III. STATUS OF THE CLAIMS

Claims 1-8, and 21-28 are currently pending in this patent application. In the Office Action dated 7/23/2007, the Examiner reopened prosecution and rejected these claims. Claims 9-20 have been canceled. Claims 1-8 and 21-28 are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments have been made since the rejection on 7/23/07.

V. SUMMARY OF THE INVENTION

The present invention is directed to using a novel sheet to protect a surface by placing this sheet in contact with the surface. The sheet includes an absorbent layer and a water-impermeable electrostatically charged layer. There are six independent claims, 1, 21, 25, 26, 27, and 28.

With reference to Claim 1, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Sheet 10 is constructed from a water-impermeable electrostatically charged sheet 11 having a top and bottom surface and an absorbent layer 12. The absorbent layer has top and bottom surfaces, the bottom surface of the absorbent layer being bonded to the top surface of the electrostatically charged sheet. The absorbent layer is divided into a plurality of cells 14. Liquid is prevented from moving between the cells.

Claims 2-6 depend from claim 1 and add further limitations regarding the composition of the absorbent layer.

Claim 7 depends from claim 1 and adds the limitation that the cells are defined by hydrophobic barriers 13 in the absorbent layer.

With reference to claim 8, refer to Figure 2, and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 8 depends from claim 1 and additionally requires a hydrophobic layer 21 bonded to the top surface of the absorbent layer. The hydrophobic layer contains a plurality of pores 22 that allow liquid incident on the hydrophobic layer to pass through that layer and be absorbed by the underlying absorbent layer.

With respect to Claim 21, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 21 requires a water-impermeable layer 11 in contact with an absorbent layer 12, wherein the absorbent layer is an open cell foam.

Claim 22 depends from Claim 21 and requires that the absorbent layer 12 is electrostatically charged.

With respect to Claim 23, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12 wherein the absorbent layer includes a fibrous mat.

Claim 24 depends from Claim 23 and further requires that the fibrous mat be electrostatically charged.

With respect to Claim 25, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. The absorbent layer includes a plurality of hydrophobic barriers 13 that define the cells and prevent liquid from moving between the cells.

With respect to Claim 26, refer again to Figure 2 and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 26 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. A hydrophobic layer 21 is bonded to a surface of the absorbent layer and includes a plurality of pores 22.

With respect to Claim 27, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged water-impermeable layer 11 and an absorbent layer 12 that are bonded together.

With respect to Claim 28 refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged

water-impermeable layer 11 and an absorbent layer 12 that are bonded together. The absorbent layer is divided into a plurality of cells 14 by a plurality of liquid impermeable barriers 13 that prevent liquid from moving from one cell to another.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Rejection of Claims 1 and 25 under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling.

B. Rejection of Claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite.

C. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of US 3,409,199 to Lake.

D. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of WO9812126 to Grone *et al* (hereafter "Grone").

E. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 5,807,366 to Milani *et al* (hereafter "Milani").

F. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 6,162,961 to Tanner *et al* (hereafter "Tanner").

G. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of US 5,789,076 to Isohata.

H. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

I. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

J. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

H. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

I. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

VII. ARGUMENT

A. Examiner's Burden

1. Rejection under 35 U.S.C. 112, second paragraph

The inquiry under the second paragraph of 35 U.S.C. 112 “is merely to determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity” (*In re Moore*, 169 USPQ 236, 238).

2. Rejection under 35 U.S.C. 102

Under 35 U.S.C. 102, the Examiner has the burden of showing by reference to the cited art each claim limitation in the reference. Anticipation under 35 U.S.C. 102 requires that each element of the claim in issue be found either expressly or inherently in a single prior art reference. *In re King*, 231 USPQ 136, 138 (Fed. Cir. 1986); *Kalman v. Kimberly-Clark Corp.*, 218 USPQ 781, 789 (Fed. Cir. 1983). The mere fact that a certain thing may result from a given set of circumstances is not sufficient to sustain a rejection for anticipation. *Ex parte Skinner*, 2 USPQ2d 1788, 1789 (BdPatApp&Int 1986). “When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference” (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). Under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element “is necessarily present in the thing described in the reference.” *Cont'l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). “Inherent anticipation requires that the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

3. Rejection under 35 U.S.C. 103

To sustain a rejection under 35 U.S.C. 103, the Examiner must show that the combined references teach each of the elements of the claim or that there is some motivation in the art for altering one of the teachings to arrive at the combined set of teachings. "The mere fact that a reference could be modified to produce the patented invention would not make the modification obvious unless it is suggested by the prior art." (*Libbey-Owens-Ford v. BOC Group*, 4 USPQ 2d 1097, 1103). "When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference" (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). In addition, the Examiner must show that there is some motivation in the art that would cause someone of ordinary skill to combine the references, and that in making the combination, there was a reasonable expectation of success. Where the claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under section 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. *In re Vaeck*, 20 USPQ2d 1438, 1442(CAFC 1991).

The mere fact that all of the limitations are known separately in the art is not sufficient to sustain a rejection for obviousness. Identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references.

The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Whether the rejection is based on an express or an implicit showing, there must be particular findings related thereto. *In re Kotzab* (CA FC) 55 USPQ2d 1313, 1316

B. Rejection of claims 1 and 25 under U.S.C. 112, first paragraph

1. Initial observations relating to the rejection of both of the claims

This rejection has been put forward after numerous rejections have been made with respect to the claims in question. In particular, this rejection is being made after three appeals have been filed. The first appeal was terminated by the Examiner to introduce a new grounds for rejection including rejections under 25 U.S.C. 112, second paragraph. The second appeal was also terminated by the Examiner to introduce yet another new grounds for rejection. A third appeal was then filed to appeal the new grounds for rejection and that appeal was decided in Applicant's favor with respect to all of the claims except Claims 19 and 20. Hence, the claims in question have been examined by the Examiner, the Examiner's supervisor, the committee that reviewed each of the appeal briefs, and the Board, and none of the individuals raised an objection under 35 U.S.C. 112, first paragraph. Hence, Applicant submits that the record implicitly argues against the rejections in question that are now being made by the Examiner, since all of these persons who are skilled in the art have had no trouble understanding the invention and how it is made and used.

2. Rejection of Claim 1

Claim 1 requires that the protective covering includes an absorbent layer that is bonded to a water impermeable electrostatically charged sheet and that the absorbent layer is divided into a plurality of cells for containing liquid within the boundaries of the cells, the liquid being prevented from moving between the cells. As best Applicant can understand the Examiner's objection, the Examiner maintains that boundaries must be hydrophobic, since the example taught in the specification utilizes hydrophobic boundaries, and that the claim is defective because the hydrophobic boundaries prevent the liquid from moving between the cells, not the boundaries or the cells themselves.

The specification refers to a preferred embodiment in which the absorbent layer is divided into cells by impregnating the absorbent material with a barrier material that prevents liquid trapped in the cell from seeping out of the cell (page 3, starting at line 5 of the specification). The specification goes on to state that the barriers could be constructed from any hydrophobic material that can be introduced into the absorbent material (page 3, starting at line 15). The specification goes on to list two exemplary materials varnish and paraffin. However, one of ordinary skill would understand that the barrier material could be a non-hydrophobic material in the case that the liquid being contained in the cells formed by the barriers would not be inhibited from moving between the cells by a hydrophobic material.

Hence, Applicant submits that the essential element is a barrier that defines the cells such that liquid is prevented from moving between the cells. Sufficient examples are given to allow one of ordinary skill to choose an appropriate barrier material depending on the liquid to be contained. Accordingly, Applicant submits that Claim 1 is enabled by the specification and the broadest embodiments enabled do not require hydrophobic barriers.

3. Rejection of Claim 25

Claim 25 specifically requires that the absorbent layer includes a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells by said barriers. Claim 25 includes the limitations that the Examiner asserts are missing from Claim 1. Furthermore, the Examiner admits that the specification teaches such barriers. Accordingly, Applicant submits that Claim 25 is not defective under 35 U.S.C. 112, first paragraph.

C. Rejection of Claim 7, and Claims 1 and 25 under 35 U.S.C. 112, second paragraph

In making this rejection, the Examiner states that the term “said hydrophobic barriers defining said cells” is uncertain. First, the Examiner states that the word “defining” is not specific enough to detail how the barriers are defined. Second, the Examiner questions whether or not the barriers themselves contain cells within. Third, the Examiner states that if “the liquid is water, then it is not logical for the barriers to be hydrophobic.”

First, Applicant submits that the wording in claim 7, which remains in its originally filed, un-amended state, has not raised any concern with respect to indefiniteness under U.S.C. 112, with either the Examiner or the Board of Appeals, through a lengthy series of office actions and appeals spanning several years. Applicant submits that the Examiner and other individuals that have reviewed this claim have apparently understood the scope and meaning of the term “hydrophobic barriers defining said cells” sufficiently to suggest that the claim limitations were satisfied by several different combinations of prior art in previous office actions, without raising any issue of indefiniteness.

Second, a cell is, by definition, a small bounded space (Webster’s New Collegiate Dictionary). The claim clearly states that the barriers define the cells; hence, the cells must have boundaries that include the barriers. Applicant submits that the wording in question clearly indicates that the physical extent of the cells is defined by the barriers. Whether or not there are additional cells of some sort within the cells that are defined by the boundaries is irrelevant to the claim at issue.

Third, Applicant submits that it is perfectly logical for cells that are to contain water to be bounded by hydrophobic barriers, as the boundaries will not be wet by the water, and hence, can prevent the water from leaking through the boundaries.

Accordingly, Applicant submits that claim 7 is definite and does point out and distinctly claim the subject matter of the invention.

While the Examiner did not specifically reject Claims 1 and 25 under 35 U.S.C. 112, second paragraph, the Examiner’s remarks under the rejection of Claim 7 contained a paragraph objecting to these claims because the term “the boundaries” has insufficient antecedent basis. As noted above, the term cell is defined to be a bounded space; hence, cells inherently have boundaries. Accordingly, Applicant submits that there is no need to recite that the cells have boundaries prior to referring to boundaries of the cells. Once again, this terminology has been reviewed numerous times, and none of the reviewers, including the Examiner, has found that there is insufficient antecedent basis for the term.

D. Summary of the teachings of the prior art cited by the Examiner

1. Schelhorn

Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like with the absorbent layer next to the meat. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the wrapping is applied to the poultry with the absorbent layer against the poultry (column 2, lines 6-8).

The only mention of electrostatic charge in the reference is a passage stating that the surface of the sheet that is bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to the electrostatically treated sheet to improve the bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

2. Lake

Lake teaches a rigid tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that are sufficiently large to allow liquid to enter the recesses and to be trapped within the recesses as long as the tray remains in a horizontal position. Lake teaches that one of the advantages of the tray lie in the fact that the tray **does not** include an absorbent layer, since such layers can lead to dehydration of the contents of the tray (col. 3, lines 45-55).

3. Grone

Grone teaches a tray for holding meat or the like in which the tray can be reused. The tray includes an absorbent layer on the bottom of the tray constructed from an open-cell plastic.

4. Milani

Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. The article is

charged to a first charge and the particles are charged to the opposite charge so as to cause the particles to be coupled to the article when the particles are introduced into the article. It is the distribution of the particles that improves the liquid distribution, not the electrostatic charge on the web. There is no teaching in Milani that the modified article obtained by introducing particles into the fibers or web is electrostatically charged after the introduction of the particles. In this regard, it should be noted that even if the underlying fibers or web are permanently charged, that charge would be cancelled by the oppositely charged particles that are introduced and coupled to the fibers or web.

5. Tanner

Tanner teaches an absorbent article having a layer of absorbent material between two layers of non-absorbent material. The improved absorption of the article is the result of the composition of the absorbent layer. The only mention of electrostatic charging in Tanner is a statement that the absorbent layer can be formed by attracting fibers to an electrostatically charged surface (column 14, lines 31-38). There is no teaching that the fibers are charged during this process or, more importantly, that the fibers are charged after the sheet of fibers is removed from the surface.

6. Isohata

Isohata teaches a food wrapping material having a sheet of semi-permeable material in contact with an absorbent layer. The semi-permeable material is a water impermeable layer that has holes therein. The layer removes liquid from the surface of the meat or poultry and sequesters that liquid in the absorbent layer to prevent discoloration of the meat.

E. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake.

1. Rejection of Claims 1, 2, 25, and 28

With reference to claim 1, the Examiner states that Schelhorn teaches all the claim limitations except for requiring that the absorbent layer be divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells. The Examiner looks to Lake for the missing teachings. The Examiner maintains that it would be obvious to apply the teachings of Lake to the sheet taught by

Schelhorn to retain liquid in the cells “to prevent the bottom of the tray from becoming wet and maintaining the strength of the tray structure”

As noted above, Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the composition is used by placing the moisture-absorbing layer against the poultry.

The only mention of electrostatic charge in Schelhorn is a passage stating that the surface of the sheet that is to be bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to improve bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

It should be noted that the electrostatic surface treatment of plastics, e.g., corona discharge, is used to alter the chemical composition of the surface, clean the surface, or remove static charge from the surface. The state of the surface after such treatment in terms of any residual electrostatic charge depends on the specifics of the particular treatment. Since such surface treatment is used to remove static charge, it is clear that the surface of the plastic is not inherently charged after such treatments. Furthermore, even if the surface were charged immediately after the treatment, such surface charges dissipate over time. Hence, it is not inherently true that the surface would have a charge at the time it is bonded to the absorbent sheet, or more importantly, after it is bonded to the absorbent sheet. The Examiner has the burden of showing that the water impermeable sheet of Schelhorn always has an electrostatic charge after it is bonded to the absorbent layer. The Examiner has not pointed to any evidence of such an electrostatic charge.

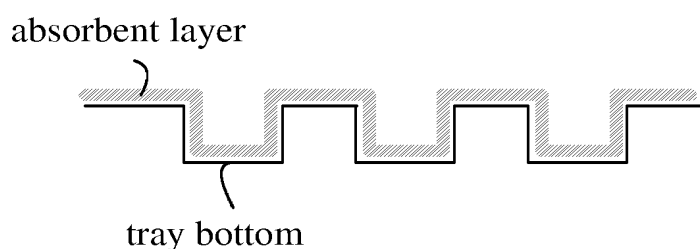
Lake teaches a tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that trap liquid. As noted above, Lake teaches that one of the advantages of the tray taught therein lies in the fact

that the tray does not include an absorbent layer, since such layers can lead to dehydration of the contents of the tray. Hence, if anything, Lake teaches away from including absorbing material in the tray.

The Examiner maintains that it would be obvious to add dividing cells to the composition of Schelhorn because Lake teaches that such cells prevent the bottom of the tray from becoming wet and maintaining the strength of tray structure.

As best Applicant can understand the Examiner's argument, it would appear that the Examiner is proposing combining the teaching of the reference so that the water impermeable sheet of Schelhorn has recesses similar to that shown in Lake. Alternatively, the Examiner could be arguing that the tray of Lake would have the composition of Schelhorn over the recessed surface thereby providing an absorbent layer that is divided into cells that contain liquid and prevent liquid from moving between the cells.

In either case, one would be left with a water impermeable layer having recesses therein and a layer of absorbent material that is somehow forced to conform to the impermeable layer as shown below. In addition, the water impermeable layer would need to be electrostatically charged.



First, it should be noted that such an arrangement would not provide an arrangement in which liquid was prevented from moving between the cells by barriers. If one cell contains liquid and the adjacent cells do not, the water absorbent material will wick the liquid up the side of the recess having the liquid and over into the adjacent recesses. Hence, the proposed combination would not satisfy the limitations of the claims in question.

Second, as noted above, Lake teaches that the absorbent material can lead to dehydration of the meat stored in tray. The purpose of the recesses in the tray of Lake is to

sequester the liquid without introducing an absorbent layer. Hence, if anything, the prior art teaches away from the embodiment proposed by the Examiner.

Furthermore, the strength of the tray in Lake lies in the plastic from which it is made, not from any absorbent material introduced into the tray. Hence, there would be no reason to construct the second alternative discussed above, since Lake teaches away from such a structure.

With respect to the first possible combination, there is no reason to put recesses in the water-impermeable wrapping composition of Schelhorn. The water-impermeable layer already protects any surface outside the packaged product from becoming wet. Schelhorn teaches that the wrapping composition must be flexible so that it can be wrapped completely around the product being protected. The composition of Lake is inherently inflexible, since the recesses would be lost if the tray were flexible enough to wrap around an object.

Finally, Applicant disagrees with the Examiner's reading of Schelhorn. The claims at issue require that the absorbent layer is bonded to the top surface of the electrostatically charged sheet and that the absorbent layer be divided into a plurality of cells that contain liquid within the boundaries of the cells. Schelhorn teaches a water impermeable sheet that is electrostatically treated prior to bonding the sheet to an absorbent layer. Claim 1 requires that the sheet be electrostatically charged after it is bonded to the absorbent layer. The Examiner has not pointed to any teaching in Schelhorn that any residual electrostatic charge is present when the absorbent layer is bonded to the sheet. As noted above, electrostatic treatments used to alter the surface properties of a plastic prior to some chemical step do not necessarily leave a residual charge on the sheet. Furthermore, the act of bonding the absorbent layer will discharge the surface charges obtained by the electrostatic treatments if the bonding material or the absorbent layer has any free ions. The Examiner has the burden of showing that the water-impermeable sheet is charged after the absorbent layer is bonded. The Examiner has not provided any evidence of such a charge. Lake does not provide the missing teachings. Hence, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to claims 1, 2, 25, and 28

2. Rejection of Claim 7

Claim 7 depends from Claim 1 and requires that the absorbent layer includes a plurality of hydrophobic barriers that define the cells. The Examiner looks to Lake as teaching hydrophobic barriers, namely the walls of the recesses in the tray constructed from a hydrophobic barrier.

The problem with the Examiner's argument is that the claim requires the barriers to be in the absorbent layer. Lake teaches that the tray, which, at best, is analogous to the water impermeable sheet of Schelhorn having the barriers. Even if one were to cover the tray of Lake with an absorbent layer, with or without the water-impermeable layer of Schelhorn, the absorbent layer would still not include the hydrophobic barriers. Accordingly, Applicant submits that there are additional grounds for allowing Claim 7.

F. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of Grone

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring that the absorbent layer comprises an open cell foam. The Examiner looks to Grone for the missing teachings.

First, as noted above with respect to claim 1, from which claim 3 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet with the absorbent layer being divided into a plurality of cells. Grone does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, Applicant submits that Lake teaches away from the combination suggested by the Examiner.

At best, Grone teaches that an open cell foam could be inserted into a tray such as that taught in Lake to act as an absorbent. However, as noted above, Lake teaches away from such an absorbent layer. Furthermore, if one were to use an absorbent layer in the tray of Lake, there would be no reason to add the recesses taught in Lake, since the foam would contain the liquid.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 3 and the claims dependent therefrom.

G. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Milani.

The Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for requiring that the open cell foam is electrostatically charged. The Examiner looks to Milani for the missing teachings. The Examiner maintains that it would be obvious to modify the open cell foam absorbent of the combination of Schelhorn, Lake and Grone by making it electrostatically charged to improve “liquid distribution” within it.

First, as noted above with respect to claim 3, from which claim 4 depends, the combination of Schelhorn, Lake and Grone does not teach the claim limitation requiring an absorbent layer bonded to a surface of an electrostatically charged sheet. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches a fibrous article that has absorbent particles distributed through out the article. The article is manufactured by charging the web and introducing particles that carry the opposite charge. The Examiner has not pointed to any teaching in Milani that the fibrous article remains charged after the particles are introduced therein. In this regard, it should be noted that the charges on the particles cancel the charges on the web when the particles stick to the web. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 4.

H. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Tanner.

With respect to claim 5, the Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for teaching a fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious

to modify the combination of Schelhorn, Lake and Grone by substituting an electrostatically charged fibrous mat for the absorbent layer in Shelhorn to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

First, as noted above with respect to claim 1 from which claim 5 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet. Grone and Tanner do not provide the missing teachings.

Second, as noted above, Lake teaches away from using absorbent layers next to the article being packaged because the absorbent material leads to dehydration of the packaged item. Increasing the absorption of the layer by utilizing the layer of Tanner would only make this problem worse. Hence, if anything the art teaches away from the combination proposed by the Examiner.

Accordingly, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 5 and the claims dependent therefrom.

Claim 6 depends from claim 5 and additionally requires that the fibrous mat is electrostatically charged. The Examiner points to two passages in Tanner (col. 14, line 32-41, col. 1, lines 45-68) as providing this teaching, and disclosing the advantages noted above with respect to claim 5.

First, as noted above, the only mention of electrostatic charging in Tanner, in the cited passages or elsewhere, is made in the context of being one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that any electrostatic charge remains on the fibers after the mat of fibers is formed and removed from that surface.

Second, the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged mat.

Third, the mat of Tanner is designed to hold large amounts of an ionic liquid, such as urine. While in the liquid state, the ionic charges would cancel the charge on the mat if such a charge exists. Hence, the benefits claimed by the Examiner, if those benefits depended on the electrostatic charge of the mat, would not be realized. Accordingly, Applicant submits that there are additional reasons for allowing claim 6.

I. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of Isohata.

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring a hydrophobic layer with pores bonded to the top surface of the absorbent layer. The Examiner looks to Isohata for the missing teachings. The Examiner maintains that it would be obvious to utilize the covering of Isohata with the combination of Schelhorn and Lake to direct food drip to the underlying absorbent sheet to prevent the meat from being discolored.

As noted above with respect to claim 1 from which claim 8 depends, the combination of Schelhorn and Lake does not teach an absorbent layer with cells bonded to a surface of an electrostatically charged sheet. Isohata does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, if anything, the art teaches away from the combination proposed by the Examiner, since Lake teaches that an absorbent layer next to the meat leads to dehydration. Hence, improving the absorption and sequestering of the liquid from the product goes against the teachings of Lake and would lead to increased dehydration of the meat. Finally, the package of Lake already sequesters the juices in a manner that prevents direct contact between the meat and the juices, and hence, there is no improvement over the system taught in Lake. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 8.

J. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

The Examiner states that Schelhorn teaches all the claim limitations of these claims except for an electrostatically charged fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious to modify Schelhorn by

including an electrostatically charged fibrous mat to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

As noted above with respect to claim 6, Applicant submits that the only mention of electrostatic charging in Tanner is in regard to one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that, after the mat of fibers is formed and removed from that surface, any electrostatic charge remains on the fibers.

Second, also as noted above with respect to claim 6, Applicant submits that the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged one. In this regard, it should be noted that charging the mat increases the cost with no benefit; hence, if anything, one of ordinary skill would use the uncharged mat to obtain the benefits cited by the Examiner. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 24.

K. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

The Examiner states that Isohata teaches all the claim limitations except for the water-impermeable sheet being electrostatically charged. The Examiner looks to Schelhorn for the missing teachings. The Examiner maintains that it would be obvious to charge the lower sheet 5 taught by Isohata to achieve an improvement in the adhesive bonding characteristics as taught by Schelhorn.

Applicant submits that the combination of teachings suggested by the Examiner would not satisfy the claim limitations. Furthermore, Applicant submits that the motivation suggested by the Examiner for making the combination is flawed.

First, Applicant disagrees with the Examiner's reading of Isohata. The Examiner points to Figure 1 of Isohata, identifying lower sheet 5 as the water-impermeable sheet required by the claim. Applicant submits that the associated text cited by the Examiner (col. 2, lines 50-65 and col. 3, lines 1-40) actually teaches that sheet 5 is permeable. Hence,

charging this sheet, as the Examiner suggests, would not produce an electrostatically charged water-impermeable sheet as required by the claim limitation in question.

Second, regarding the benefit of improved adhesion offered by the teachings of Schelhorn, Applicant submits that the method taught by Isohata includes vacuum sealing (column 2, lines 36-40) to provide an air-tight seal around the plastic wrapping. Hence, poor adhesion is not a problem, and there would be no benefit in electrostatically charging one of the intervening sheets to improve that adhesion. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 26.

L. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

Claim 27 requires an electrostatically charged sheet bonded to an absorbent sheet. As noted above, Schelhorn, at most, teaches a water impermeable sheet that is treated electrostatically to improve the bonding of the absorbent sheet to the water impermeable sheet when the two sheets are bonded by patches of adhesive. The Examiner has not pointed to any teaching that the water impermeable sheet is electrostatically charged after that sheet is bonded to the absorbent sheet. In this regard, it should be noted that electrostatic treatments do not necessarily lead to an electrostatic charge being present on the surface after the treatment is completed, no less at some subsequent time when the sheets are bonded. For example, any such charge would dissipate over time, or be discharged by contact with the absorbent material or adhesive. Hence, it is not inherent that the embodiment taught in Schelhorn has an electrostatically charged sheet after the absorbent sheet is bonded. Accordingly, Applicant submits that Schelhorn does not anticipate Claim 27.

M. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

Claim 21 contains the limitations of Claim 27 with the additional limitation that the absorbent layer is an open cell foam. The Examiner looks to Schelhorn as teaching the limitations of Claim 27 and looks to Grone as teaching an absorbent layer comprising an open cell foam.

Applicant repeats the arguments made above with respect to the rejection of Claim 21 as being anticipated by Schelhorn. Grone does not provide the missing teachings. Hence, the combination of the references does not provide all of the limitations of Claim 21. Accordingly, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to Claim 21.

N. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

Claim 22 depends from Claim 21 and introduces the additional limitation that the open cell foam is electrostatically charged. The Examiner states that Schelhorn and Grone provide the teachings of Claim 22 and looks to Milani as providing the missing teaching. The Examiner states that it would be obvious to combine the teachings to provide improved liquid distribution.

First, as noted above, Applicant submits that the combination of Schelhorn and Grone does not teach the limitations of Claim 22. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web in a manner that is aided by utilizing an electrically charged web and charging the particles to improve the attachment and distribution of the particles within the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. Merely charging the absorbent layer of Grone does not provide the benefit to which the Examiner points. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone. Milani requires a fibrous mat or web to allow the particles to infiltrate the fibrous article. The Examiner has not pointed to any teaching in the art that such a method could be used on the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 22.

VIII. CONCLUSION

Applicant respectfully submits that for the reasons of fact and law argued herein, the decision of the Examiner in finally rejecting Claims 1-8, 24-28 should be reversed.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Calvin B. Ward". The signature is fluid and cursive, with the first name "Calvin" being the most prominent part.

Calvin B. Ward
Registration No. 30,896
Date: February 4, 2008

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APPENDIX

THE CLAIMS ON APPEAL:

1. A protective covering comprising:

a water-impermeable electrostatically charged sheet having a top and bottom surface;

and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being bonded to said top surface of said electrostatically charged sheet, said absorbent layer being divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells.
2. The protective covering of Claim 1, wherein said absorbent layer comprises paper.
3. The protective covering of Claim 1, wherein said absorbent layer comprises an open cell foam.
4. The protective covering of Claim 3, wherein said foam is electrostatically charged.
5. The protective covering of Claim 1, wherein said absorbent layer comprises a fibrous mat.
6. The protective covering of Claim 5, wherein said fibrous mat is electrostatically charged.
7. The protective covering of Claim 1, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining said cells.
8. The protective covering of Claim 1 further comprising a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores

therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

21. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet,

wherein said absorbent layer comprises an open cell foam.

22. The protective covering of Claim 21, wherein said foam is electrostatically charged.

23. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a fibrous mat.

24. The protective covering of Claim 23, wherein said fibrous mat is electrostatically charged.

25. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid, said liquid being prevented from moving between said cells by said barriers.

26. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer further comprises a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

27. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said electrostatically charged layer is bonded to said absorbent layer.

28. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer is divided into a plurality of cells for containing liquid by liquid impermeable barriers that prevent liquid from moving from one cell to another.

Evidence Appendix

none

Related Proceedings Appendix

none

PATENT APPLICATION

Attorney Docket: 54391

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

| | |
|-----------------|---|
| Applicant: | Ward |
| Serial No.: | 9/655,987 |
| Filed: | 9/6/2000 |
| For: | Composition for Protecting Work Surfaces from Contamination |
| Group Art Unit: | 1774 |
| Examiner: | Dicus, Tamra |

SUPPLEMENTAL BRIEF FOR APPELLANT

Hon. Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Sir:

This is an appeal from the decision of the Examiner dated 7/23/2007, rejecting Claims 1-8 and 21-28 in the above-identified patent application. Applicant originally filed an appeal after a final rejection dated 6/2/03. The Examiner terminated this first appeal because the Examiner wished to make new grounds for rejection. In addition to the new art rejection, the Examiner made a Section 112, second paragraph rejection that the Examiner could have made in the office action that preceded the first appeal. Because of this untimely new rejection, Applicant was forced to abandon the first appeal to correct this Section 112 issue. Were it not for that late Section 112 rejection, Applicant would have re-instated the original appeal, thereby saving the fees in question. Applicant filed a second appeal on 8/5/04 appealing the new grounds for rejection. The Examiner pointed out an error in the brief in question, and Applicant filed a corrected brief on 10/14/04. The Examiner then rejected the corrected brief because the Examiner maintained that the previously filed brief was defective because the summary of the invention did not contain a concise statement explanation of the subject matter of each independent claim on appeal and because the grouping of the claims lacked a

statement that each group of claims “stand or fall together”. Applicant filed another brief pointing out that the Examiner was in error with respect to the “stand or fall together rejection” and that the Summary of the Invention had not changed since the original brief had been filed and that it met the requirements as proved by insertions indicating which independent claims were discussed at each point in the Summary.

The Examiner then re-opened prosecution again to make yet another new grounds for rejection. Appellant filed a brief to address the new grounds for rejection on 4/27/2006. The Board affirmed all the claims except 19 and 20 in Appellant’s favor on 2/8/2007. Applicant subsequently canceled Claims 19 and 20 in response to an office action citing the decision of the Board and stating that the remaining claims would be allowed. The Examiner then re-opened prosecution citing new art.

The present brief is filed to address the new grounds for rejection presented in the office action dated 7/23/2007. In this office action, the Examiner indicated that Applicant could reinstate the appeal and file a supplemental brief addressing the new grounds for rejection. However, Applicant submits that only a new appeal is proper at this point, since the Board has already rendered a decision in the last appeal. Accordingly, Applicant filed a notice of appeal on December 12, 2007. This brief is filed to support that appeal.

It is assumed that the Examiner has now withdrawn all previous grounds for rejection. However, all previously filed briefs in this application are hereby incorporated by reference and relied upon to address the earlier grounds for rejection and to provide any missing required information that may be missing from this brief.

I. REAL PARTY IN INTEREST

The real party in interest is Dr. Calvin B. Ward.

II. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to appellant, the appellant's legal representative, or assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in this pending appeal. However, there may be another appeal in 10/278,190 that would be affected by the outcome of this appeal.

III. STATUS OF THE CLAIMS

Claims 1-8, and 21-28 are currently pending in this patent application. In the Office Action dated 7/23/2007, the Examiner reopened prosecution and rejected these claims. Claims 9-20 have been canceled. Claims 1-8 and 21-28 are the subject of this appeal.

IV. STATUS OF AMENDMENTS

No amendments have been made since the rejection on 7/23/07.

V. SUMMARY OF THE INVENTION

The present invention is directed to using a novel sheet to protect a surface by placing this sheet in contact with the surface. The sheet includes an absorbent layer and a water-impermeable electrostatically charged layer. There are six independent claims, 1, 21, 25, 26, 27, and 28.

With reference to Claim 1, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Sheet 10 is constructed from a water-impermeable electrostatically charged sheet 11 having a top and bottom surface and an absorbent layer 12. The absorbent layer has top and bottom surfaces, the bottom surface of the absorbent layer being bonded to the top surface of the electrostatically charged sheet. The absorbent layer is divided into a plurality of cells 14. Liquid is prevented from moving between the cells.

Claims 2-6 depend from claim 1 and add further limitations regarding the composition of the absorbent layer.

Claim 7 depends from claim 1 and adds the limitation that the cells are defined by hydrophobic barriers 13 in the absorbent layer.

With reference to claim 8, refer to Figure 2, and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 8 depends from claim 1 and additionally requires a hydrophobic layer 21 bonded to the top surface of the absorbent layer. The hydrophobic layer contains a plurality of pores 22 that allow liquid incident on the hydrophobic layer to pass through that layer and be absorbed by the underlying absorbent layer.

With respect to Claim 21, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 21 requires a water-impermeable layer 11 in contact with an absorbent layer 12, wherein the absorbent layer is an open cell foam.

Claim 22 depends from Claim 21 and requires that the absorbent layer 12 is electrostatically charged.

With respect to Claim 23, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12 wherein the absorbent layer includes a fibrous mat.

Claim 24 depends from Claim 23 and further requires that the fibrous mat be electrostatically charged.

With respect to Claim 25, refer again to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. Claim 23 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. The absorbent layer includes a plurality of hydrophobic barriers 13 that define the cells and prevent liquid from moving between the cells.

With respect to Claim 26, refer again to Figure 2 and the discussion thereof that begins at line 18 of page 4 of the specification. Claim 26 requires an electrostatically charged, water-impermeable layer 11 and absorbent layer 12. A hydrophobic layer 21 is bonded to a surface of the absorbent layer and includes a plurality of pores 22.

With respect to Claim 27, refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged water-impermeable layer 11 and an absorbent layer 12 that are bonded together.

With respect to Claim 28 refer to Figure 1 and the discussion thereof that begins at line 4 of page 3 of the specification. This embodiment includes an electrostatically charged

water-impermeable layer 11 and an absorbent layer 12 that are bonded together. The absorbent layer is divided into a plurality of cells 14 by a plurality of liquid impermeable barriers 13 that prevent liquid from moving from one cell to another.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

A. Rejection of Claims 1 and 25 under 35 U.S.C. 112, first paragraph, as based on a disclosure, which is not enabling.

B. Rejection of Claim 7 under 35 U.S.C. 112, second paragraph, as being indefinite.

C. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of US 3,409,199 to Lake.

D. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of WO9812126 to Grone *et al* (hereafter "Grone").

E. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 5,807,366 to Milani *et al* (hereafter "Milani").

F. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, Grone, and further in view of US 6,162,961 to Tanner *et al* (hereafter "Tanner").

G. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of US 5,789,076 to Isohata.

H. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

I. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

J. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

H. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

I. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

VII. ARGUMENT

A. Examiner's Burden

1. Rejection under 35 U.S.C. 112, second paragraph

The inquiry under the second paragraph of 35 U.S.C. 112 “is merely to determine whether the claims do, in fact, set out and circumscribe a particular area with a reasonable degree of precision and particularity” (*In re Moore*, 169 USPQ 236, 238).

2. Rejection under 35 U.S.C. 102

Under 35 U.S.C. 102, the Examiner has the burden of showing by reference to the cited art each claim limitation in the reference. Anticipation under 35 U.S.C. 102 requires that each element of the claim in issue be found either expressly or inherently in a single prior art reference. *In re King*, 231 USPQ 136, 138 (Fed. Cir. 1986); *Kalman v. Kimberly-Clark Corp.*, 218 USPQ 781, 789 (Fed. Cir. 1983). The mere fact that a certain thing may result from a given set of circumstances is not sufficient to sustain a rejection for anticipation. *Ex parte Skinner*, 2 USPQ2d 1788, 1789 (BdPatApp&Int 1986). “When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference” (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). Under the doctrine of inherency, if an element is not expressly disclosed in a prior art reference, the reference will still be deemed to anticipate a subsequent claim if the missing element “is necessarily present in the thing described in the reference.” *Cont'l Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). “Inherent anticipation requires that the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) (quoting *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)).

3. Rejection under 35 U.S.C. 103

To sustain a rejection under 35 U.S.C. 103, the Examiner must show that the combined references teach each of the elements of the claim or that there is some motivation in the art for altering one of the teachings to arrive at the combined set of teachings. "The mere fact that a reference could be modified to produce the patented invention would not make the modification obvious unless it is suggested by the prior art." (*Libbey-Owens-Ford v. BOC Group*, 4 USPQ 2d 1097, 1103). "When the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference" (*In re Rijckaert*, 28 USPQ2d, 1955, 1957). In addition, the Examiner must show that there is some motivation in the art that would cause someone of ordinary skill to combine the references, and that in making the combination, there was a reasonable expectation of success. Where the claimed subject matter has been rejected as obvious in view of a combination of prior art references, a proper analysis under section 103 requires, *inter alia*, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure. *In re Vaeck*, 20 USPQ2d 1438, 1442(CAFC 1991).

The mere fact that all of the limitations are known separately in the art is not sufficient to sustain a rejection for obviousness. Identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. To establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references.

The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Whether the rejection is based on an express or an implicit showing, there must be particular findings related thereto. *In re Kotzab* (CA FC) 55 USPQ2d 1313, 1316

B. Rejection of claims 1 and 25 under U.S.C. 112, first paragraph

1. Initial observations relating to the rejection of both of the claims

This rejection has been put forward after numerous rejections have been made with respect to the claims in question. In particular, this rejection is being made after three appeals have been filed. The first appeal was terminated by the Examiner to introduce a new grounds for rejection including rejections under 25 U.S.C. 112, second paragraph. The second appeal was also terminated by the Examiner to introduce yet another new grounds for rejection. A third appeal was then filed to appeal the new grounds for rejection and that appeal was decided in Applicant's favor with respect to all of the claims except Claims 19 and 20. Hence, the claims in question have been examined by the Examiner, the Examiner's supervisor, the committee that reviewed each of the appeal briefs, and the Board, and none of the individuals raised an objection under 35 U.S.C. 112, first paragraph. Hence, Applicant submits that the record implicitly argues against the rejections in question that are now being made by the Examiner, since all of these persons who are skilled in the art have had no trouble understanding the invention and how it is made and used.

2. Rejection of Claim 1

Claim 1 requires that the protective covering includes an absorbent layer that is bonded to a water impermeable electrostatically charged sheet and that the absorbent layer is divided into a plurality of cells for containing liquid within the boundaries of the cells, the liquid being prevented from moving between the cells. As best Applicant can understand the Examiner's objection, the Examiner maintains that boundaries must be hydrophobic, since the example taught in the specification utilizes hydrophobic boundaries, and that the claim is defective because the hydrophobic boundaries prevent the liquid from moving between the cells, not the boundaries or the cells themselves.

The specification refers to a preferred embodiment in which the absorbent layer is divided into cells by impregnating the absorbent material with a barrier material that prevents liquid trapped in the cell from seeping out of the cell (page 3, starting at line 5 of the specification). The specification goes on to state that the barriers could be constructed from any hydrophobic material that can be introduced into the absorbent material (page 3, starting at line 15). The specification goes on to list two exemplary materials varnish and paraffin. However, one of ordinary skill would understand that the barrier material could be a non-hydrophobic material in the case that the liquid being contained in the cells formed by the barriers would not be inhibited from moving between the cells by a hydrophobic material.

Hence, Applicant submits that the essential element is a barrier that defines the cells such that liquid is prevented from moving between the cells. Sufficient examples are given to allow one of ordinary skill to choose an appropriate barrier material depending on the liquid to be contained. Accordingly, Applicant submits that Claim 1 is enabled by the specification and the broadest embodiments enabled do not require hydrophobic barriers.

3. Rejection of Claim 25

Claim 25 specifically requires that the absorbent layer includes a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells by said barriers. Claim 25 includes the limitations that the Examiner asserts are missing from Claim 1. Furthermore, the Examiner admits that the specification teaches such barriers. Accordingly, Applicant submits that Claim 25 is not defective under 35 U.S.C. 112, first paragraph.

C. Rejection of Claim 7, and Claims 1 and 25 under 35 U.S.C. 112, second paragraph

In making this rejection, the Examiner states that the term “said hydrophobic barriers defining said cells” is uncertain. First, the Examiner states that the word “defining” is not specific enough to detail how the barriers are defined. Second, the Examiner questions whether or not the barriers themselves contain cells within. Third, the Examiner states that if “the liquid is water, then it is not logical for the barriers to be hydrophobic.”

First, Applicant submits that the wording in claim 7, which remains in its originally filed, un-amended state, has not raised any concern with respect to indefiniteness under U.S.C. 112, with either the Examiner or the Board of Appeals, through a lengthy series of office actions and appeals spanning several years. Applicant submits that the Examiner and other individuals that have reviewed this claim have apparently understood the scope and meaning of the term “hydrophobic barriers defining said cells” sufficiently to suggest that the claim limitations were satisfied by several different combinations of prior art in previous office actions, without raising any issue of indefiniteness.

Second, a cell is, by definition, a small bounded space (Webster’s New Collegiate Dictionary). The claim clearly states that the barriers define the cells; hence, the cells must have boundaries that include the barriers. Applicant submits that the wording in question clearly indicates that the physical extent of the cells is defined by the barriers. Whether or not there are additional cells of some sort within the cells that are defined by the boundaries is irrelevant to the claim at issue.

Third, Applicant submits that it is perfectly logical for cells that are to contain water to be bounded by hydrophobic barriers, as the boundaries will not be wet by the water, and hence, can prevent the water from leaking through the boundaries.

Accordingly, Applicant submits that claim 7 is definite and does point out and distinctly claim the subject matter of the invention.

While the Examiner did not specifically reject Claims 1 and 25 under 35 U.S.C. 112, second paragraph, the Examiner’s remarks under the rejection of Claim 7 contained a paragraph objecting to these claims because the term “the boundaries” has insufficient antecedent basis. As noted above, the term cell is defined to be a bounded space; hence, cells inherently have boundaries. Accordingly, Applicant submits that there is no need to recite that the cells have boundaries prior to referring to boundaries of the cells. Once again, this terminology has been reviewed numerous times, and none of the reviewers, including the Examiner, has found that there is insufficient antecedent basis for the term.

D. Summary of the teachings of the prior art cited by the Examiner

1. Schelhorn

Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like with the absorbent layer next to the meat. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the wrapping is applied to the poultry with the absorbent layer against the poultry (column 2, lines 6-8).

The only mention of electrostatic charge in the reference is a passage stating that the surface of the sheet that is bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to the electrostatically treated sheet to improve the bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

2. Lake

Lake teaches a rigid tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that are sufficiently large to allow liquid to enter the recesses and to be trapped within the recesses as long as the tray remains in a horizontal position. Lake teaches that one of the advantages of the tray lie in the fact that the tray **does not** include an absorbent layer, since such layers can lead to dehydration of the contents of the tray (col. 3, lines 45-55).

3. Grone

Grone teaches a tray for holding meat or the like in which the tray can be reused. The tray includes an absorbent layer on the bottom of the tray constructed from an open-cell plastic.

4. Milani

Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. The article is

charged to a first charge and the particles are charged to the opposite charge so as to cause the particles to be coupled to the article when the particles are introduced into the article. It is the distribution of the particles that improves the liquid distribution, not the electrostatic charge on the web. There is no teaching in Milani that the modified article obtained by introducing particles into the fibers or web is electrostatically charged after the introduction of the particles. In this regard, it should be noted that even if the underlying fibers or web are permanently charged, that charge would be cancelled by the oppositely charged particles that are introduced and coupled to the fibers or web.

5. Tanner

Tanner teaches an absorbent article having a layer of absorbent material between two layers of non-absorbent material. The improved absorption of the article is the result of the composition of the absorbent layer. The only mention of electrostatic charging in Tanner is a statement that the absorbent layer can be formed by attracting fibers to an electrostatically charged surface (column 14, lines 31-38). There is no teaching that the fibers are charged during this process or, more importantly, that the fibers are charged after the sheet of fibers is removed from the surface.

6. Isohata

Isohata teaches a food wrapping material having a sheet of semi-permeable material in contact with an absorbent layer. The semi-permeable material is a water impermeable layer that has holes therein. The layer removes liquid from the surface of the meat or poultry and sequesters that liquid in the absorbent layer to prevent discoloration of the meat.

E. Rejection of Claims 1-2, 7, 25, and 28 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake.

1. Rejection of Claims 1, 2, 25, and 28

With reference to claim 1, the Examiner states that Schelhorn teaches all the claim limitations except for requiring that the absorbent layer be divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells. The Examiner looks to Lake for the missing teachings. The Examiner maintains that it would be obvious to apply the teachings of Lake to the sheet taught by

Schelhorn to retain liquid in the cells “to prevent the bottom of the tray from becoming wet and maintaining the strength of the tray structure”

As noted above, Schelhorn teaches a composition comprising a water impermeable sheet that is bonded to an absorbent layer that is used to wrap poultry or the like. The composition of Schelhorn provides an improvement over the prior art in that the water absorbent layer is stretchable since it is only spot bonded to the water-impermeable sheet, and hence, can withstand normal impacts without rupturing. Schelhorn teaches that the composition is used by placing the moisture-absorbing layer against the poultry.

The only mention of electrostatic charge in Schelhorn is a passage stating that the surface of the sheet that is to be bound to the absorbent layer can be electrostatically treated prior to bonding of the absorbent layer to improve bonding. There is no teaching that the water impermeable sheet has any residual charge on the surface of the sheet prior to bonding the sheet to the absorbent layer, no less, that the sheet has an electrostatic charge after bonding the sheet to the absorbent layer.

It should be noted that the electrostatic surface treatment of plastics, e.g., corona discharge, is used to alter the chemical composition of the surface, clean the surface, or remove static charge from the surface. The state of the surface after such treatment in terms of any residual electrostatic charge depends on the specifics of the particular treatment. Since such surface treatment is used to remove static charge, it is clear that the surface of the plastic is not inherently charged after such treatments. Furthermore, even if the surface were charged immediately after the treatment, such surface charges dissipate over time. Hence, it is not inherently true that the surface would have a charge at the time it is bonded to the absorbent sheet, or more importantly, after it is bonded to the absorbent sheet. The Examiner has the burden of showing that the water impermeable sheet of Schelhorn always has an electrostatic charge after it is bonded to the absorbent layer. The Examiner has not pointed to any evidence of such an electrostatic charge.

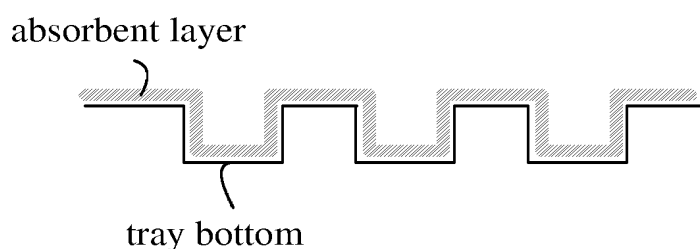
Lake teaches a tray for holding meat or poultry in which the tray is constructed from hydrophobic material and the bottom surface of the tray has recesses that trap liquid. As noted above, Lake teaches that one of the advantages of the tray taught therein lies in the fact

that the tray does not include an absorbent layer, since such layers can lead to dehydration of the contents of the tray. Hence, if anything, Lake teaches away from including absorbing material in the tray.

The Examiner maintains that it would be obvious to add dividing cells to the composition of Schelhorn because Lake teaches that such cells prevent the bottom of the tray from becoming wet and maintaining the strength of tray structure.

As best Applicant can understand the Examiner's argument, it would appear that the Examiner is proposing combining the teaching of the reference so that the water impermeable sheet of Schelhorn has recesses similar to that shown in Lake. Alternatively, the Examiner could be arguing that the tray of Lake would have the composition of Schelhorn over the recessed surface thereby providing an absorbent layer that is divided into cells that contain liquid and prevent liquid from moving between the cells.

In either case, one would be left with a water impermeable layer having recesses therein and a layer of absorbent material that is somehow forced to conform to the impermeable layer as shown below. In addition, the water impermeable layer would need to be electrostatically charged.



First, it should be noted that such an arrangement would not provide an arrangement in which liquid was prevented from moving between the cells by barriers. If one cell contains liquid and the adjacent cells do not, the water absorbent material will wick the liquid up the side of the recess having the liquid and over into the adjacent recesses. Hence, the proposed combination would not satisfy the limitations of the claims in question.

Second, as noted above, Lake teaches that the absorbent material can lead to dehydration of the meat stored in tray. The purpose of the recesses in the tray of Lake is to

sequester the liquid without introducing an absorbent layer. Hence, if anything, the prior art teaches away from the embodiment proposed by the Examiner.

Furthermore, the strength of the tray in Lake lies in the plastic from which it is made, not from any absorbent material introduced into the tray. Hence, there would be no reason to construct the second alternative discussed above, since Lake teaches away from such a structure.

With respect to the first possible combination, there is no reason to put recesses in the water-impermeable wrapping composition of Schelhorn. The water-impermeable layer already protects any surface outside the packaged product from becoming wet. Schelhorn teaches that the wrapping composition must be flexible so that it can be wrapped completely around the product being protected. The composition of Lake is inherently inflexible, since the recesses would be lost if the tray were flexible enough to wrap around an object.

Finally, Applicant disagrees with the Examiner's reading of Schelhorn. The claims at issue require that the absorbent layer is bonded to the top surface of the electrostatically charged sheet and that the absorbent layer be divided into a plurality of cells that contain liquid within the boundaries of the cells. Schelhorn teaches a water impermeable sheet that is electrostatically treated prior to bonding the sheet to an absorbent layer. Claim 1 requires that the sheet be electrostatically charged after it is bonded to the absorbent layer. The Examiner has not pointed to any teaching in Schelhorn that any residual electrostatic charge is present when the absorbent layer is bonded to the sheet. As noted above, electrostatic treatments used to alter the surface properties of a plastic prior to some chemical step do not necessarily leave a residual charge on the sheet. Furthermore, the act of bonding the absorbent layer will discharge the surface charges obtained by the electrostatic treatments if the bonding material or the absorbent layer has any free ions. The Examiner has the burden of showing that the water-impermeable sheet is charged after the absorbent layer is bonded. The Examiner has not provided any evidence of such a charge. Lake does not provide the missing teachings. Hence, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to claims 1, 2, 25, and 28

2. Rejection of Claim 7

Claim 7 depends from Claim 1 and requires that the absorbent layer includes a plurality of hydrophobic barriers that define the cells. The Examiner looks to Lake as teaching hydrophobic barriers, namely the walls of the recesses in the tray constructed from a hydrophobic barrier.

The problem with the Examiner's argument is that the claim requires the barriers to be in the absorbent layer. Lake teaches that the tray, which, at best, is analogous to the water impermeable sheet of Schelhorn having the barriers. Even if one were to cover the tray of Lake with an absorbent layer, with or without the water-impermeable layer of Schelhorn, the absorbent layer would still not include the hydrophobic barriers. Accordingly, Applicant submits that there are additional grounds for allowing Claim 7.

F. Rejection of Claim 3 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake and further in view of Grone

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring that the absorbent layer comprises an open cell foam. The Examiner looks to Grone for the missing teachings.

First, as noted above with respect to claim 1, from which claim 3 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet with the absorbent layer being divided into a plurality of cells. Grone does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, Applicant submits that Lake teaches away from the combination suggested by the Examiner.

At best, Grone teaches that an open cell foam could be inserted into a tray such as that taught in Lake to act as an absorbent. However, as noted above, Lake teaches away from such an absorbent layer. Furthermore, if one were to use an absorbent layer in the tray of Lake, there would be no reason to add the recesses taught in Lake, since the foam would contain the liquid.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 3 and the claims dependent therefrom.

G. Rejection of Claim 4 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Milani.

The Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for requiring that the open cell foam is electrostatically charged. The Examiner looks to Milani for the missing teachings. The Examiner maintains that it would be obvious to modify the open cell foam absorbent of the combination of Schelhorn, Lake and Grone by making it electrostatically charged to improve “liquid distribution” within it.

First, as noted above with respect to claim 3, from which claim 4 depends, the combination of Schelhorn, Lake and Grone does not teach the claim limitation requiring an absorbent layer bonded to a surface of an electrostatically charged sheet. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches a fibrous article that has absorbent particles distributed through out the article. The article is manufactured by charging the web and introducing particles that carry the opposite charge. The Examiner has not pointed to any teaching in Milani that the fibrous article remains charged after the particles are introduced therein. In this regard, it should be noted that the charges on the particles cancel the charges on the web when the particles stick to the web. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 4.

H. Rejection of Claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Shelhorn in view of Lake, Grone, and further in view of Tanner.

With respect to claim 5, the Examiner states that Schelhorn in view of Lake and Grone teaches the limitations of the claim except for teaching a fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious

to modify the combination of Schelhorn, Lake and Grone by substituting an electrostatically charged fibrous mat for the absorbent layer in Shelhorn to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

First, as noted above with respect to claim 1 from which claim 5 depends, the combination of Schelhorn and Lake does not teach an absorbent layer bonded to a surface of an electrostatically charged sheet. Grone and Tanner do not provide the missing teachings.

Second, as noted above, Lake teaches away from using absorbent layers next to the article being packaged because the absorbent material leads to dehydration of the packaged item. Increasing the absorption of the layer by utilizing the layer of Tanner would only make this problem worse. Hence, if anything the art teaches away from the combination proposed by the Examiner.

Accordingly, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 5 and the claims dependent therefrom.

Claim 6 depends from claim 5 and additionally requires that the fibrous mat is electrostatically charged. The Examiner points to two passages in Tanner (col. 14, line 32-41, col. 1, lines 45-68) as providing this teaching, and disclosing the advantages noted above with respect to claim 5.

First, as noted above, the only mention of electrostatic charging in Tanner, in the cited passages or elsewhere, is made in the context of being one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that any electrostatic charge remains on the fibers after the mat of fibers is formed and removed from that surface.

Second, the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged mat.

Third, the mat of Tanner is designed to hold large amounts of an ionic liquid, such as urine. While in the liquid state, the ionic charges would cancel the charge on the mat if such a charge exists. Hence, the benefits claimed by the Examiner, if those benefits depended on the electrostatic charge of the mat, would not be realized. Accordingly, Applicant submits that there are additional reasons for allowing claim 6.

I. Rejection of Claim 8 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Lake, and further in view of Isohata.

The Examiner states that Schelhorn in view of Lake teaches the limitations of the claim except for requiring a hydrophobic layer with pores bonded to the top surface of the absorbent layer. The Examiner looks to Isohata for the missing teachings. The Examiner maintains that it would be obvious to utilize the covering of Isohata with the combination of Schelhorn and Lake to direct food drip to the underlying absorbent sheet to prevent the meat from being discolored.

As noted above with respect to claim 1 from which claim 8 depends, the combination of Schelhorn and Lake does not teach an absorbent layer with cells bonded to a surface of an electrostatically charged sheet. Isohata does not provide the missing teachings. Furthermore, also as noted above with respect to claim 1, if anything, the art teaches away from the combination proposed by the Examiner, since Lake teaches that an absorbent layer next to the meat leads to dehydration. Hence, improving the absorption and sequestering of the liquid from the product goes against the teachings of Lake and would lead to increased dehydration of the meat. Finally, the package of Lake already sequesters the juices in a manner that prevents direct contact between the meat and the juices, and hence, there is no improvement over the system taught in Lake. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 8.

J. Rejection of Claims 23 and 24 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Tanner.

The Examiner states that Schelhorn teaches all the claim limitations of these claims except for an electrostatically charged fibrous mat. The Examiner looks to Tanner for the missing teachings. The Examiner maintains that it would be obvious to modify Schelhorn by

including an electrostatically charged fibrous mat to provide the advantages of low density, high absorbency, high wicking, and rapid expansion.

As noted above with respect to claim 6, Applicant submits that the only mention of electrostatic charging in Tanner is in regard to one method of forming a fibrous mat, using electrostatic attraction between the fibers and a surface on which the mat can be built up. There is no teaching that, after the mat of fibers is formed and removed from that surface, any electrostatic charge remains on the fibers.

Second, also as noted above with respect to claim 6, Applicant submits that the advantages that the Examiner lists as being provided by an electrostatically charged fibrous mat are discussed by Tanner as relating to any fibrous mat, and not specifically to an electrostatically charged one. In this regard, it should be noted that charging the mat increases the cost with no benefit; hence, if anything, one of ordinary skill would use the uncharged mat to obtain the benefits cited by the Examiner. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 24.

K. Rejection of Claim 26 under 35 U.S.C. 103(a) as being unpatentable over Isohata in view of Schelhorn.

The Examiner states that Isohata teaches all the claim limitations except for the water-impermeable sheet being electrostatically charged. The Examiner looks to Schelhorn for the missing teachings. The Examiner maintains that it would be obvious to charge the lower sheet 5 taught by Isohata to achieve an improvement in the adhesive bonding characteristics as taught by Schelhorn.

Applicant submits that the combination of teachings suggested by the Examiner would not satisfy the claim limitations. Furthermore, Applicant submits that the motivation suggested by the Examiner for making the combination is flawed.

First, Applicant disagrees with the Examiner's reading of Isohata. The Examiner points to Figure 1 of Isohata, identifying lower sheet 5 as the water-impermeable sheet required by the claim. Applicant submits that the associated text cited by the Examiner (col. 2, lines 50-65 and col. 3, lines 1-40) actually teaches that sheet 5 is permeable. Hence,

charging this sheet, as the Examiner suggests, would not produce an electrostatically charged water-impermeable sheet as required by the claim limitation in question.

Second, regarding the benefit of improved adhesion offered by the teachings of Schelhorn, Applicant submits that the method taught by Isohata includes vacuum sealing (column 2, lines 36-40) to provide an air-tight seal around the plastic wrapping. Hence, poor adhesion is not a problem, and there would be no benefit in electrostatically charging one of the intervening sheets to improve that adhesion. Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 26.

L. Rejection of Claim 27 under 35 U.S.C. 102(b) as being anticipated by Schelhorn.

Claim 27 requires an electrostatically charged sheet bonded to an absorbent sheet. As noted above, Schelhorn, at most, teaches a water impermeable sheet that is treated electrostatically to improve the bonding of the absorbent sheet to the water impermeable sheet when the two sheets are bonded by patches of adhesive. The Examiner has not pointed to any teaching that the water impermeable sheet is electrostatically charged after that sheet is bonded to the absorbent sheet. In this regard, it should be noted that electrostatic treatments do not necessarily lead to an electrostatic charge being present on the surface after the treatment is completed, no less at some subsequent time when the sheets are bonded. For example, any such charge would dissipate over time, or be discharged by contact with the absorbent material or adhesive. Hence, it is not inherent that the embodiment taught in Schelhorn has an electrostatically charged sheet after the absorbent sheet is bonded. Accordingly, Applicant submits that Schelhorn does not anticipate Claim 27.

M. Rejection of Claim 21 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone.

Claim 21 contains the limitations of Claim 27 with the additional limitation that the absorbent layer is an open cell foam. The Examiner looks to Schelhorn as teaching the limitations of Claim 27 and looks to Grone as teaching an absorbent layer comprising an open cell foam.

Applicant repeats the arguments made above with respect to the rejection of Claim 21 as being anticipated by Schelhorn. Grone does not provide the missing teachings. Hence, the combination of the references does not provide all of the limitations of Claim 21. Accordingly, Applicant submits that the Examiner has not made a *prima facie* case for obviousness with respect to Claim 21.

N. Rejection of Claim 22 under 35 U.S.C. 103(a) as being unpatentable over Schelhorn in view of Grone and Milani.

Claim 22 depends from Claim 21 and introduces the additional limitation that the open cell foam is electrostatically charged. The Examiner states that Schelhorn and Grone provide the teachings of Claim 22 and looks to Milani as providing the missing teaching. The Examiner states that it would be obvious to combine the teachings to provide improved liquid distribution.

First, as noted above, Applicant submits that the combination of Schelhorn and Grone does not teach the limitations of Claim 22. Milani does not provide the missing teachings.

Second, as noted above, Milani does not teach that charging an absorbent layer provides improved liquid distribution as asserted by the Examiner. Milani teaches that improved liquid distribution may be provided in a fibrous article or web by introducing absorbent particles into the web in a manner that is aided by utilizing an electrically charged web and charging the particles to improve the attachment and distribution of the particles within the web. It is the combination of the fibers or web and the particles attached thereto that has improved liquid distribution. Merely charging the absorbent layer of Grone does not provide the benefit to which the Examiner points. Furthermore, the Examiner has not pointed to any teaching that the method of Milani can even be applied to the open cell foam taught in Grone. Milani requires a fibrous mat or web to allow the particles to infiltrate the fibrous article. The Examiner has not pointed to any teaching in the art that such a method could be used on the open cell foam taught in Grone.

Hence, Applicant submits that the Examiner has failed to make a *prima facie* case for obviousness with respect to claim 22.

VIII. CONCLUSION

Applicant respectfully submits that for the reasons of fact and law argued herein, the decision of the Examiner in finally rejecting Claims 1-8, 24-28 should be reversed.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Calvin B. Ward". The signature is fluid and cursive, with the first name "Calvin" being the most prominent part.

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APPENDIX

THE CLAIMS ON APPEAL:

1. A protective covering comprising:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being bonded to said top surface of said electrostatically charged sheet, said absorbent layer being divided into a plurality of cells for containing liquid within the boundaries of said cells, said liquid being prevented from moving between said cells.

2. The protective covering of Claim 1, wherein said absorbent layer comprises paper.

3. The protective covering of Claim 1, wherein said absorbent layer comprises an open cell foam.

4. The protective covering of Claim 3, wherein said foam is electrostatically charged.

5. The protective covering of Claim 1, wherein said absorbent layer comprises a fibrous mat.

6. The protective covering of Claim 5, wherein said fibrous mat is electrostatically charged.

7. The protective covering of Claim 1, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining said cells.

8. The protective covering of Claim 1 further comprising a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores

therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

21. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet,

wherein said absorbent layer comprises an open cell foam.

22. The protective covering of Claim 21, wherein said foam is electrostatically charged.

23. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a fibrous mat.

24. The protective covering of Claim 23, wherein said fibrous mat is electrostatically charged.

25. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer comprises a plurality of hydrophobic barriers, said hydrophobic barriers defining a plurality of cells for containing liquid, said liquid being prevented from moving between said cells by said barriers.

26. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer further comprises a hydrophobic layer bonded to said top surface of said absorbent layer, said hydrophobic layer having a plurality of pores therethrough, said pores allowing liquid to penetrate said hydrophobic layer and be absorbed by said absorbent layer.

27. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said electrostatically charged layer is bonded to said absorbent layer.

28. A protective covering for protecting an exposed surface:

a water-impermeable electrostatically charged sheet having a top and bottom surface;
and

an absorbent layer having top and bottom surfaces, said bottom surface of said absorbent layer being in contact with said top surface of said electrostatically charged sheet, wherein said absorbent layer is divided into a plurality of cells for containing liquid by liquid impermeable barriers that prevent liquid from moving from one cell to another.

Evidence Appendix

none

Related Proceedings Appendix

none